

# METHOD AND APPARATUS FOR A UNIDIRECTIONAL SWITCHING, CURRENT LIMITED CUTOFF CIRCUIT FOR AN ELECTRONIC BALLAST

## ABSTRACT OF THE DISCLOSURE

[0042] In accordance with one aspect of the present application, a lamp inverter circuit includes a switching portion that converts a bus voltage signal into an alternating current signal. An input portion receives the bus voltage signal, and a resonant load portion drives a lamp. A preheating portion heats the lamp prior to ignition, and thereafter renders itself inactive following ignition of the lamp.

[0043] In accordance with another aspect of the present application, a method of starting a lamp includes receiving a bus voltage signal, converting the bus voltage signal into an alternating current signal, preheating the lamp to an ignition temperature, igniting the lamp and inactivating the preheating after the lamp has been ignited.

[0044] In accordance with another aspect of the application, provided is a method of igniting an auxiliary lamp, including detecting a conductive state of a main lamp in a lamp ballast circuit, the detecting being by a switch that controls preheating of the main lamp. The integrity of the main lamp is detected, and current flow is switched from the main lamp to an auxiliary lamp in the event of a main lamp failure.